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Aposentadoria por invalidez de trabalhadores da área da saúde de um hospital universitário

Disability retirement of workers in the health field at a university hospital

Jubilación por incapacidad de los trabajadores del área de la salud en un hospital universitario

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ABSTRACT

Objective: To identify the causes of disability retirement for workers in the health field at a university hospital. **Method:** A retrospective cross-sectional study conducted in 2014, by analyzing the records of the medical registry of workers in the health field of the university hospital of a public university of Paraná, who retired due to disability, from 2000 to 2013. Data were analyzed using descriptive and inferential statistics. The study was approved by the Research Ethics Committee, CAAE: 0344.0.268.000-12. **Results:** 40 were granted disability pensions. The main causes of disability retirement were mental and behavioral disorders (45.0%), followed by musculoskeletal diseases (25.0%), diseases of the circulatory system (7.5%) and neoplasias (7.5%). No significant association between variables has been made. **Conclusion:** The groups of diseases leading to disability retirement are the most common among the Brazilian population and preventable.

Descriptors: Retirement, Insurance, Disability, Health personnel, Universities.

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RESUMO

Objetivo: Identificar as causas da aposentadoria por invalidez de trabalhadores da área da saúde de um hospital universitário. **Método:** Estudo seccional retrospectivo, realizado em 2014, por meio da análise dos registros dos prontuários de saúde dos trabalhadores da área da saúde do hospital universitário de uma universidade pública paranaense que se aposentaram por invalidez, no período de 2000 a 2013. Os dados foram analisados por meio de estatística descritiva e inferencial. A pesquisa foi aprovada em Comitê de Ética em Pesquisa, CAAE: 0344.0.268.000-12. **Resultados:** Foram concedidas 40 aposentadorias por invalidez. As principais causas da aposentadoria por invalidez foram os transtornos mentais e comportamentais (45,0%), seguidos pelas doenças osteomusculares (25,0%), as doenças do aparelho circulatório (7,5%) e as neoplasias (7,5%). Não houve associação significativa entre as variáveis estudadas. **Conclusão:** Os grupos de doenças que levaram à aposentadoria por invalidez são os mais comuns entre a população brasileira e passíveis de prevenção.

Descritores: Aposentadoria, Seguro por invalidez, Pessoal de saúde, Universidades.

RESUMEN

Objetivo: Identificar las causas de jubilación por incapacidad para los trabajadores en el área de la salud en un hospital universitario. **Método:** Estudio transversal retrospectivo realizado en el año 2014 mediante el análisis de los registros de salud de los trabajadores de la salud del hospital universitario de una universidad pública de Paraná que se retiró debido a una discapacidad, de 2000 a 2013. Los datos se analizaron mediante estadística descriptiva e inferencial. El estudio fue aprobado por el Comité de Investigación Ética, CAAE: 0344.0.268.000-12. **Resultados:** 40 se concedieron pensiones de invalidez. Las principales causas de jubilación por incapacidad fueron los trastornos mentales y del comportamiento (45,0%), seguidas de las enfermedades musculoesqueléticas (25,0%), las enfermedades del sistema circulatorio (7,5%) y los tumores (7,5%). No hay asociación significativa entre las variables. **Conclusión:** Los grupos de enfermedades que conducen a la jubilación por incapacidad son los más comunes entre la población brasileña y son prevenibles.

Descriptores: Jubilación, Seguro por discapacidad, Personal de salud, Universidades.

INTRODUCTION

Etymologically, retiring derives from the Latin intransitive verb *pausare*, which means to land, to stop, to cease, to rest. In the French language, it corresponds to the verbs *retirer* or *retraiter*, which means to withdraw, to isolate, to be secluded at home, and in English, to retire means: to depart, to retreat.¹ In Portuguese, there are some definitions such as: the one that stopped working due to lack of health or by reaching a certain age limit; that which is no longer used, that loses its usefulness or that which is housed in a room. Through this perspective, to be retired is to no longer be useful in life, or to be one that does not participate in activities considered important for society.²

In the field of Brazilian public administration, retirement expressed the temporary or permanent shutdown of the worker of its work environment, whether by time

of contribution, by age, by special order or incapacity to work due to subsequent pathological changes resulting from diseases or accidents. After retirement, the taxpayer individual receives a salary valued proportionally or integrally according to their previous earnings.³

It is understood by disability a total, permanent and omni professional incapacity of the worker to perform its duties, function, job or when the performance of its activities entails risks to the life of the individual or others, as well as the worsening of their disease or when productivity does not meet the minimum required for the duties of the position, function or job.³

The departure of the world of labor causes unique changes for people. When this exit happens through disability retirement, repercussions occur both in the labor force, as in the individual's daily life. The reduction of the working population in the labor market influences on economic and social issues, as these people in productive age come to depend on a benefit sometimes lesser than the received when they were active in labor, which may cause a decrease in the household income.⁴

Among the leading causes of inability to work there are the Chronic Non-Communicable Diseases (CNCD), which may occur transiently or settle permanently generating an early retirement.⁴⁻⁵

Regarding risk factors for disability retirement, studies have linked mechanical work and psychosocial factors: low education and socioeconomic status, comorbidities, extreme physical fatigue, low professional qualification, monotonous and stressful work.⁶⁻⁷

Investigations conducted in Brazil on the causes of invalidity retirement generally addressed the beneficiaries of the National Social Security Institute (INSS) and federal employees in unspecific occupational areas.^{4,7-8} However, a study showed that this variable may be closely associated with the causes⁹

After searches performed in the databases, national studies involving this issue within health professionals were not obtained; it is important to investigate this phenomenon in this occupational class, since its activity is considered insalubrious, stressful and there is a process of illness inherent to this work, especially for those working in the hospital area.¹⁰

Thus, it is believed that identifying the factors that can predict disability retirements of health professionals is crucial to enable the managers and the workers themselves to formulate public policies and conduct planning for the promotion and prevention of disability retirements and therefore improve the workers quality of life.

According to the abovementioned, it came to the following question: What are the main reasons for disability retirement among healthcare workers of a teaching hospital? To answer this question, this study aimed to identify the causes of disability retirement for workers in the health field of a university hospital.

METHODS

This is a quantitative study, of a sectional retrospective type, using secondary data, ie, data was sought in documents that recorded past events in a given time and place.

The survey was conducted in a public university in Paraná that has 1,682 teachers, 3,841 university staff and a student community of 18,817 academics. Offering 54 graduate and 236 post-graduate courses, distributed in nine study centers. Among its complementary institutes, the university hospital (UH) stands out, activated since 1971, the second largest public hospital in Paraná, engaged in the provision of health care service in a macro-region of the state in virtually all nearly sixty medical specialties, training of human resources, research and technological development, as well as technical and scientific cooperation with the network services.¹¹

The source data for this study consisted of health records of workers in the health field who retired for disability, from 2000 to 2013, that were in the Specialized Service in Safety Engineering in Laboral Medicine (SESMT) and in the Service of Medical Records and Statistics (SAME) of the university mentioned. This period was established for data collection because the files of these services dated from 2000. Were included the records of workers that had functions exclusively in the university hospital. Were excluded those with illegible handwriting.

Data were collected from January to March 2014, through a previously designed form, in order to raise the sociodemographic and occupational data (gender, age, job title, workplace, position and time of service) and information on retirement, such as the date of retirement and medical diagnosis, according to the International Classification of Diseases and Health Related Problems in its tenth revision (ICD-10), 2008 version.¹²

The Statistical Package for Social Sciences (SPSS) version 20.0 was used for data analysis, via descriptive statistics and chi-square association test, with a significance level of 5% ($p < 0.05$).

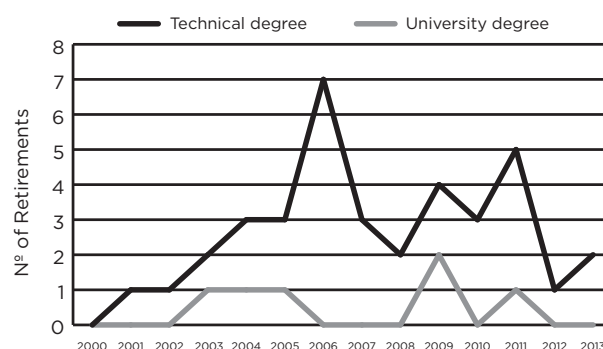
All the procedures adopted followed the ethical guidelines of Resolution 466/2012 of the National Health Council, including approval by the Ethics Committee of the State University of Londrina (UEL) under the CAAE nº 0344.0.268.000-12.

RESULTS AND DISCUSSION

In the period of 2000-2013, it was found that 40 disability retirements were granted among employees of the health area at the studied university. There was variability in the annual distribution of the number of these pensions, and in 2000 there was no case registered.

There was a consistency in the number of cases of retirement disability among workers with university level of education. The retired workers with a technical degree of education had an increase in cases from 2004 to 2011, with a consequent decrease from 2012, as demonstrated in Chart 1.

Chart 1 - Distribution of disability pensions according to the education level. Londrina/PR, 2014



There was a predominance of female subjects (77.3%), age group under 50 years old, especially from 40 to 49 years (52.3%), and the minimum retirement age was 32 years old and the maximum 68 years old, the average age was of 48.3 years old and a standard deviation (SD) of 8.2 years. With regard to occupational characteristics, the average time of service was of 17.06 years (SD = 6.26 years) and most had between 10 and 19 years of developed activities (63.6%).

It can be stated that the found distribution of sex, which presents a greater number of women retired for disability, may be associated with the studied population, since there is a predominance of females working in the health area.¹³ However, other research shows similar results regarding this variable in the general population.⁶⁻⁷

As for the age group of retirement, there was a greater focus on individuals aged between 40 and 49 years old, and with advancing age, there was a tendency to reduction in disability pensions. This fact may be due to the accumulated service time, leading the worker to favor retirement in the modality of length of service, since there is a financial difference between the types of retirement and social security aid.¹⁴

It was also identified that 86.4% of pensioners had technical degree of education. These were nursing assistants (75%), radiology (4.5%) and laboratory technicians (6.8%). As for the university level education positions, nurses (4.5%), doctors (4.5%), physiotherapists (2.3%) and pharmaceuticals (2.3%) were identified.

The predominance of pensions for disability of technical workers, especially nursing assistants, may be related to the fact that these workers are in greater number in healthcare institutions due to the combination of factors related to work organization, as splitting and subdivision of tasks, people management policies and the hierarchical organizational structure.¹⁵⁻¹⁶

A study in Finland found that the disability retirement risks increases among those who work shifts, suffering from hazardous exposures and heavy physical workload, as well as, low control over the work, these characteristics are present in the work of assistants nurses, which may also extend to other positions occupied by professionals

with technical degree of education that represent 86.3% of pensions granted for disability.⁹

Regarding retirements related to ICD-10 chapters, it was identified that 45% concerned MBD which were the main cause of disability for retirement during the study period, the main representatives of this chapter are depressive episodes, bipolar affective disorder, schizophrenia and phobic-anxiety disorders. Next, 25% occurred by MD, presenting as major diseases lumbar disc disorders (lumbar herniation), low back pain, motor deficits resulting from fractures and musculoskeletal disorders related to work (MSDRW), two cases being highlighted as work accident, one for patient transportation and another for falling in the work environment. The CSD occurred in 7.5%, with the main causes being acute myocardial infarction and the sequelae of cerebrovascular diseases. Neoplasms were also present in 7.5%, especially breast cancer and lung cancer as the main causes of the chapter. Retirement reasons among the top-level workers were neoplasias, MBD and MD. There was no significant association between level of education and the reason of retirement, as shown in Table 1.

Table 1 – Distribution of retirement reasons for disability of health workers by level of education. Londrina, 2014

Variables	Level of education				Total	P
	Technical		University			
	N	%	N	%	N	
CID-10 Chapter						
Chap. II - Neoplasms [tumors]	2	5,0	1	2,5	3	7,5
Cap. V – Mental and behavioral disorders	16	40,0	2	5,0	18	45,0
Cap. IX – Diseases of the circulatory system	3	7,5	-	-	3	7,5
Cap. XIII – Musculoskeletal and connective tissue disorders	9	22,5	1	2,5	10	25,0
Other chapters*	6	15,0	-	-	6	15,0
Total	36	90,0	4	10,0	40	100,0

* Composed of: Chapter IV (endocrine, nutritional and metabolic diseases), Chapter VI (nervous system disorders), Chapter VII (diseases of the eye and annexes), Chapter X (respiratory diseases), Chapter XX (external causes of morbidity and mortality), Chapter XXI (factors influencing health status and contact with health services).

It is known that illnesses are strongly related to the hereditary factor, however, social categories, family and labor context are also decisive factors for health, especially if one has to experience dissatisfaction and suffering at work.¹⁷⁻¹⁸

The MBD were constituted in this study as the main cause leading to retirement disability. It is a fact that the work is configured as an essential element for one's health,

but when individuals cannot manage the differences in the workplace, a disease process is initiated, being impossible to separate work from private life.¹⁸

It predicates that the psychic disorders generated in the workplace constitute the genesis of the disease process and are directly related to the following factors: biomechanical, psychosocial, work organization and laboral psychodynamic.^{6,18}

In this sense, work activities are full of overloads, including excessive working hours and patterns, work overload, care management, interpersonal relationships, high psychological demands, among others. These complications can compromise the health status, implicating in musculoskeletal disorders, cardiovascular and pulmonary disease, and mental disorders.¹⁹

MBD are present in about 10% of adults and 20 to 25% of the population tends to present during life at least one episode of a mental disorder, indicating the social relevance of the issue. It is estimated that by 2020 the burden of these diseases will account for 27% of all occupational disabilities. Therefore, one must consider the real burden of psychopathological manifestations and their costs in human, social and economic terms, as well as discrimination and failure of services essential to the treatment, setting the overview of mental disorders in the world.²⁰

Authors state that MBD represents four out of the ten leading causes of disability worldwide. They found that the highest incidence of retirements for this reason affects the technical level positions, corroborating with the findings of this study.²¹

Studies in Germany and the Netherlands identified MBD as one of the most important causes of absence from work and permanent disability, being depression a major contributor to early retirement.²²⁻²³

In a research conducted in Brazil between 1999 to 2002, it was found that the CSD were the main cause for the benefit to disability retirement, representing 29.2% of concessions, followed by MSD (19.5%) and MBD (12.4%). Results that differ from the present study regarding CSD, which occupied the third place along with neoplasias.⁷

A different result was obtained in a study with the objective of identifying the impact of CNCD in disease-aids and disability pensions granted by the INSS, which showed that the three main causes were CSD (23.62%), MBD (15.14%) and MSD (14.69%).²⁴

Another survey carried out with public servers disability retirees of the Federal University of Rio de Janeiro, from 2000 to 2010, found that the MBD were the main reason for the granting of disability retirement (35.6%), followed by cancer (15.6%), CSD (14.3%) and MSD (14.1%).²⁵

Table 2 shows the socio-demographic and occupational variables according to the two main causes of disability retirement. It was identified that the MSD occurred exclusively in females. There was no significant association between sociodemographic and occupational variables with

any of the two disability retirement causes among workers of the health area studied.

Table 2 - Distribution of socio-demographic and occupational characteristics of health of servers retired by disability according to the two main chapters of ICD-10. Londrina PR, 2014

Variables	Musculoskeletal Diseases			Mental and Behavioral Disorders		
	Yes	%	P	Yes	%	P
Sex						
Female	10	25,0	0,068	14	35,0	0,751
Male	0	0,0		4	10,0	
Age Group						
< 50 years	6	15,0	1,000	8	20,0	0,069
50 and more	4	10,0		10	25,0	
Level of Education						
Technical Degree	9	22,5	1,000	16	40,0	0,832
University Degree	1	2,5		2	5,0	
Time served						
< 20 years	9	22,5	0,206	14	35,0	0,714
20 years and over	1	2,5		4	10,0	
Total	10	25,0		18	45,0	

It is noteworthy that the annual distribution of pensions resulting from these two great chapters of ICD-10 diagnoses found that the MSD, as a cause of disability for retirement, occurred only during the period from 2005 to 2011. In contrast to the MBD that had a constant distribution over of the historical series analyzed.

A cohort study in 15 Finnish municipalities from 2000 to 2011, with 3,943 workers found that, of these, 476 have retired on disability of which 23.6% were related to MBD and 38.4% to MSD. By correlating the morbidities in these individuals at baseline it was concluded that MSD and MBD are strong predictors for early retirement.²⁶ These results are similar to ones in the present study which obtained MSD and MBD as the main causes of retirement.

Among the main risk factors related to MSD, some working and ergonomic conditions are worth mentioning, such as: inadequate equipment, repetitiveness of movements, excessive force and the positions adopted in the development of some labor activities.²⁷

Considering the results of the research conducted with disability retirees one can conclude that the four main causes of retirement do not differ from the general population and workers in the health field. However, the main causes differ between populations, indicating that MBD and MSD are more common among workers in the health area who

retired on disability. This information can be attributed to specific health work, which demands high emotional and physical loads.²⁸⁻²⁹

CONCLUSION

MBD, MSD, CSD and neoplasms were the diseases that most contributed to the disability retirement of the workers studied and are among the disease groups that are configured amid the most common in the Brazilian population and are preventable. It is noteworthy that the MSD occurred exclusively in women within an age group still considered as productive.

This study contributed substantially as a starting point to knowledge of the reality of these retirees and arouse the attention of the institution managers and of the employees themselves to formulate public policies and to seek plans that aim to promote health and avoid early retirement.

Although the results have achieved the objectives of the research, it is suggested that further research is developed aiming to produce a more detailed discussion of the similarities and differences between disability retirees of the Brazilian public institutions in order to achieve a better quality of life in this important stage of life.

REFERENCES

1. Vasconcelos Filho OA. Aposentadoria espontânea: uma nova leitura de seus efeitos no contrato de emprego. Jus Navigandi [online homepage]. Teresina, 2007; 1351 [Cited in 2014 Jun 13]. Available at: <http://jus.com.br/revista/texto/9599>.
2. Martins JT, Bobroff MCC, Ribeiro RP, Gaspar SG, Basani AB, Stanganelli NC. Retirement: meanings for nursing professionals. *Rev enferm UFPE on line*. 2014; 8(5):1323-9.
3. Ministério do Planejamento Orçamento e Gestão (BR). Secretaria de Recursos Humanos. Portaria nº 797, de 22 de março de 2010. Manual de Perícia Oficial em Saúde do Servidor Público Federal. Brasília (DF); 2010.
4. Santos TR, Silva Júnior WR, França ISX, Cavalcanti AL, Fernandes MGM. Perfil socioeconômico-demográfico do beneficiário do Instituto Nacional do Seguro Social aposentado por invalidez e suas causas, no Estado da Paraíba, no quinquênio 2007-2011. *Rev bras estud popul*. 2012; 29(2):349-59.
5. Alcântara MA, Nunes GS, Ferreira BCMS. Distúrbios osteomusculares relacionados ao trabalho: o perfil dos trabalhadores em benefício previdenciário em Diamantina (MG, Brasil). *Ciênc saúde coletiva*. 2011; 16(8):3427-36.
6. Sterud T. Work-related psychosocial and mechanical risk factors for work disability: a 3-year follow-up study of the general working population in Norway. *Scand J Work Environ Health*. 2013;39(5):468-76.
7. Gomes MMF, Figoli MGB, Ribeiro AJF. Da atividade à invalidez permanente: um estudo utilizando dados do Regime Geral de Previdência Social (RGPS) do Brasil no período 1999-2002. *Rev bras estud popul*. 2010; 27(2):297-316.
8. Sampaio RF, Silveira AM, Parreira VF, Makino AT, Mateo MM. Análise das aposentadorias por incapacidade permanente entre os trabalhadores da Universidade Federal de Minas Gerais no período de 1966 a 1999. *Rev Assoc Med Bras*. 2003;49(1):60-6.
9. Lahelma E, Laaksonen M, Lallukka T, Martikainen P, Pietiläinen O, Saastamoinen P, et al. Working conditions as risk factors for disability retirement: a longitudinal register linkage study. *BMC Public Health*. 2012;12:309.
10. Brotto TCA, Dalbello-Araujo M. É inerente ao trabalho em saúde o adoecimento de seu trabalhador? *Rev bras saúde ocup*. 2012; 37(126):290-305.
11. Universidade Estadual de Londrina (UEL). UEL em dados 2014: uma universidade em evolução. UEL: Londrina; 2014.
12. Organização Mundial da Saúde (OMS). Classificação Estatística Internacional de Doenças e Problemas Relacionados à Saúde – Décima Revisão, versão 2008. [online homepage]. 2008 [Cited in 2014 Jul 02]. Available at: <http://www.datasus.gov.br/cid10/V2008/WebHelp/cid10.html>.
13. Franca FM, Ferrari R. Síndrome de Burnout e os aspectos sócio-demográficos em profissionais de enfermagem. *Acta paul enferm*. 2012;25(5):743-8.
14. Ministério da Previdência Social (BR). Procuradoria federal especializada junto ao INSS. A PFE/INSS e os benefícios por incapacidade. Brasília (DF); 2012.
15. Secretaria de Saúde (PR). Vigilância Epidemiológica em Saúde do Trabalhador [online homepage]. 2009 [Cited in 2015 Abr 30]. Available at: <http://www.saude.pr.gov.br/modules/conteudo/conteudo.php?conteudo=1475>.
16. Loro MM, Zeitoun RCG, Guido LA, Silva RM, Kolankiewicz ACB. Riscos ocupacionais e a saúde do trabalhador de enfermagem – buscando evidências. *Rev pesqui cuid fundam*. 2014; 6(4):1610-21.
17. Bizarria F, Tassigny M. Saúde do trabalhador: experiências de universidades federais brasileiras. *Rev bras qual vida*. 2013; 5(3):72-83.
18. Dejours C. A loucura do trabalho: estudo de psicopatologia do trabalho. 5 ed. São Paulo (SP): Cortez; 1992.
19. Silva JLL, Santos RSFB, Costa FS, Taveira RPC, Teixeira LR. Estrés en la actividad administrativa de enfermería: consecuencias para la salud. *Av enferm*. 2013; XXXI(2):144-152.
20. Organização Mundial da Saúde (OMS). Organização Panamericana da Saúde (OPAS). Relatório sobre a saúde no mundo 2001: Saúde mental - nova concepção, nova esperança. Genebra (CH): Organização Mundial da Saúde; 2001.
21. Miranda FAN, Carvalho GRP, Fernandes RL, Silva MB, Sabino MGG. Saúde mental, Trabalho e Aposentadoria: focalizando a alienação mental. *Rev bras enferm*. 2009; 62(5):711-6.
22. Wedegaertner F, Arnhold-Kerri S, Sittaro NA, Bleich S, Geyer S, Lee WE. Depression- and anxiety-related sick leave and the risk of permanent disability and mortality in the working population in Germany: a cohort study. *BMC Public Health*. 2013; 13:145.
23. Koopmans PC, Bültmann U, Roelen CAM, Hoedeman R, Van Der Klink JLL, Groothoff JW. Recurrence of sickness absence due to common mental disorders. *Int Arch Occup Environ Health*. 2011; 84(2):193-201.
24. Moura AAG, Carvalho EF, Silva NJC. Repercussão das doenças crônicas não-transmissíveis na concessão de benefícios pela previdência social. *Ciênc saúde coletiva*. 2007;12 (6):1661-72.
25. Brites RMR, Abreu AMM, Pinto JESS. Prevalência de alcoolismo no perfil das aposentadorias por invalidez dentre trabalhadores de uma universidade federal. *Rev bras enferm*. 2014; 67(3):373-80.
26. Kaila-Kangas L, Haukka E, Miranda H, Kivekäs T, Ahola K, Luukkainen R, et al. Common mental and musculoskeletal disorders as predictors of disability retirement among Finns. *J Affect Disord*. 2014;165:38-44.
27. Duarte AF, Souza APC, Macedo AF, Pereira AC, Araújo FF. Fatores de riscos para distúrbios osteomusculares relacionados ao trabalho - DORT em profissionais de enfermagem. *Rev pesqui cuid fundam*. 2012;(Ed. Supl.):53-6.
28. Paparelli R, Sato L, Oliveira F. A saúde mental relacionada ao trabalho e os desafios aos profissionais da saúde. *Rev bras saúde ocupac*. 2011;36(123):118-27.
29. Ribeiro RP, Martins JT, Marziale MHP, Robazzi MLCC. Work-related illness in nursing: an integrative review. *Rev Esc Enferm USP*. 2012; 46(2):495-504.

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